

PATENT APPLICATION Mo-6877 Nit 364

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN APPLICATION OF	)
NUMBER OF THE ALL	) GROUP NO: 1626
YUKIYOSHI WATANABE ET AL.	) ) EXAMINER: R. GERSTL
SERIAL NO.: 10/030,361	, )
FILED: MARCH 05, 2002	)
TITLE: NEMATICIDAL TRIFLUOROBUTENES	)

### **DECLARATION UNDER 37 CFR 1.132**

Assistant Commissioner for Patents Washington, D.C. 20231
Sir:

- I, Wolfram Andersch of 51468 Bergisch Gladbach, Schlodderdicher Weg 77, Germany, declare as follows:
- 1. I studied biology at the University of Göttingen and obtained a doctor's degree in biology in 1983. Since 1984 I have been employed by Bayer AG in Germany as a biologist specializing in plant protection.
- 2. I am familiar with the subject matter of the above-identified United States patent application.
  - 3. The following tests were carried out under my direction:

Active compounds, identified either generally as being prepared according to the invention or by specific Example numbers of the above-identified patent application, were tested in the following test systems.

## 1. Determination of plant tolerance using soya (Glycine max) as an example

The active compound as set forth below is weighed to obtain the required quantity and dissolved in water with the aid of acetone and an emulsifier. The active compound solution (concentration: 20 ppm) is applied to the earth to be used as the substrate in a corresponding volume and incorporated evenly therein with the aid of a mixer.

Equal numbers of seeds/young plants are placed/planted in treated and non-treated earth. The plants are kept in a greenhouse under identical, optimum growth conditions. At regular intervals the damage to the plants and its intensity are determined in relation to the symptoms involved (e.g. damage to the leaves or stems, dead tissue, discoloration).

#### Results

Compound according to WO 95/24403 (Example VII.26), Turnbull et al.

Compound according to the present invention (Example 3)

### 2. Determination of selectivity

### Myzus test

Solvent:

31 parts by weight of acetone

Emulsifier:

1 part by weight of alkylaryl polyglycol ether

To produce a suitable preparation of active compound, 1 part by weight of active compound is mixed with the stated amounts of solvent and emulsifier, and the concentrate is diluted with emulsifier-containing water to the desired concentration.

Faba bean seedlings (*Vicia faba minor*) which are heavily infested by the peach aphid (*Myzus persicae*) are treated by being dipped into the preparation of active compound of the desired concentration.

After the desired period of time, the kill in % is determined. 100% means that all aphids have been killed; 0% means that none of the aphids have been killed.

Table A

Compound	Concentration of active ingredient [ppm]	Effect [%]
CI S SO <sub>2</sub> F	100	0
Example 3 according to the invention		
CI SO <sub>2</sub> F	100	100
Example VII.26 according to Turnbull et al.		

# Tetranychus test (OP-resistant/dip treatment)

Solvent: 7 parts by weight of dimethylformamide

Emulsifier: 2 part by weight of alkylaryl polyglycol ether

To produce a suitable preparation of active compound, 1 part by weight of active compound is mixed with the stated amounts of solvent and emulsifier, and the concentrate is diluted with emulsifier-containing water to the desired concentration.

Bean plants (*Phaseolus vulgaris*) which are heavily infested by all stages of the greenhouse red spider mite (*Tetranychus urticae*) are dipped into a preparation of active compound of the desired concentration.

After the desired period of time, the effect in % is determined. 100% means that all spider mites have been killed; 0% means that none of the spider mites have been killed.

Table B

Compound	Concentration of active ingredient [ppm]	Effect [%]
CI S SO <sub>2</sub> F F	100	0
Example 3 according to the invention		
CI S SO <sub>2</sub> F	100	98
Example VII.26 according to Turnbull et al.		

#### Coccinella larvae test

Solvent: 7 parts by weight of dimethylformamide

Emulsifier: 2 part by weight of alkylaryl polyglycol ether

To produce a suitable preparation of active compound, 1 part by weight of active compound is mixed with the stated amounts of solvent and emulsifier, and the concentrate is diluted with emulsifier-containing water to the desired concentration.

Filter paper which has been dipped into a preparation of active compound of the desired concentration is dried and put on the bottom of a box. Larvae of the sevenspotted lady beetle (*Coccinella septempunctata*) are put on the filters. The larvae are fed with vetch aphids (*Megoura vicia*).

After the desired period of time, the effect in % is determined. 100% means that all lady beetles have been killed; 0% means that none of the lady beetles have been killed.

Table B

Compound	Concentration of active ingredient [ppm]	Effect [%]
CI S SO <sub>2</sub> F	100	0
Example 3 according to the invention		
CI S SO <sub>2</sub> F	100	90
Example VII.26 according to Turnbull et al.		

- The experiments described above show that the tested active 4. ingredient according to the invention combines excellent nematicidal activity with low phytotoxicity and high selectivity with regard to nematodes and insects.
- The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

Further Declarant Sayeth Not.

Signed at Mas Las \_\_\_\_\_\_, Germany, this \_\_\_\_\_\_\_\_, day of \_\_\_\_\_\_\_\_, 2003.

Dr. Wolfram Andersch